

(b) Regression and correlation

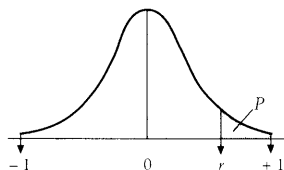
Table 16. Significance of correlation coefficient, when $\rho = 0$

Values of r significant at α (one-tail) and 2α (two-tail) levels for different number of degrees of freedom ($\nu = n - 2$) where n = number of observations in the sample. Example: If $|r| > 0.4438$ when $\nu = 18$, H_0 that $\rho = 0$ may be rejected at 5% level of significance ($2\alpha = 0.05$). When testing partial correlation coefficient, $\nu = n - k - 2$, where k = number of variables held constant, e.g. for $r_{12.3}$, $k = 1$.

ν	$\alpha = 0.25$ $2\alpha = 0.5$	$\alpha = 0.15$ $2\alpha = 0.3$	$\alpha = 0.1$ $2\alpha = 0.2$	$\alpha = 0.05$ $2\alpha = 0.1$	$\alpha = 0.025$ $2\alpha = 0.05$	$\alpha = 0.01$ $2\alpha = 0.02$	$\alpha = 0.005$ $2\alpha = 0.01$	$\alpha = 0.001$ $2\alpha = 0.002$	$\alpha = 0.0005$ $2\alpha = 0.001$
1	.7071	.8910	.9511	.9877	.9969	.9995	.9999	1.0000	1.0000
2	.5000	.7000	.8000	.9000	.9500	.9800	.9900	.9980	.9990
3	.4040	.5851	.6870	.8054	.8783	.9343	.9587	.9859	.9911
4	.3473	.5112	.6084	.7293	.8114	.8822	.9172	.9633	.9741
5	.3091	.4592	.5509	.6694	.7545	.8329	.8745	.9350	.9509
6	.2811	.4202	.5067	.6215	.7067	.7887	.8343	.9049	.9249
7	.2596	.3896	.4716	.5822	.6664	.7498	.7977	.8751	.8983
8	.2423	.3648	.4428	.5494	.6319	.7155	.7646	.8467	.8721
9	.2281	.3442	.4187	.5214	.6021	.6851	.7348	.8199	.8470
10	.2161	.3267	.3981	.4973	.5760	.6581	.7079	.7950	.8233
11	.2058	.3116	.3802	.4762	.5529	.6339	.6835	.7717	.8010
12	.1968	.2984	.3646	.4575	.5324	.6120	.6614	.7501	.7800
13	.1890	.2868	.3507	.4409	.5140	.5923	.6411	.7301	.7604
14	.1820	.2764	.3383	.4259	.4973	.5742	.6226	.7114	.7419
15	.1757	.2671	.3271	.4124	.4821	.5577	.6055	.6940	.7247
16	.1700	.2587	.3170	.4000	.4683	.5425	.5897	.6777	.7084
17	.1649	.2510	.3077	.3887	.4555	.5285	.5751	.6624	.6932
18	.1602	.2439	.2992	.3783	.4438	.5155	.5614	.6481	.6788
19	.1558	.2375	.2914	.3687	.4329	.5034	.5487	.6346	.6652
20	.1518	.2315	.2841	.3598	.4227	.4921	.5368	.6219	.6524
21	.1481	.2259	.2774	.3515	.4132	.4815	.5256	.6099	.6402
22	.1447	.2207	.2711	.3438	.4044	.4716	.5151	.5986	.6287
23	.1415	.2159	.2653	.3365	.3961	.4622	.5052	.5879	.6178
24	.1384	.2113	.2598	.3297	.3882	.4534	.4958	.5776	.6074
25	.1356	.2071	.2546	.3233	.3809	.4451	.4869	.5679	.5974
26	.1330	.2031	.2497	.3172	.3739	.4372	.4785	.5587	.5880
27	.1305	.1993	.2451	.3115	.3673	.4297	.4705	.5499	.5790
28	.1281	.1957	.2407	.3061	.3610	.4226	.4629	.5415	.5703
29	.1258	.1923	.2366	.3009	.3550	.4158	.4556	.5334	.5620
30	.1237	.1891	.2327	.2960	.3494	.4093	.4487	.5257	.5541
35	.1144	.1751	.2156	.2746	.3246	.3810	.4182	.4916	.5189
40	.1070	.1638	.2018	.2573	.3044	.3578	.3932	.4633	.4896
45	.1008	.1544	.1903	.2429	.2876	.3384	.3721	.4394	.4647
50	.0956	.1465	.1806	.2306	.2732	.3218	.3542	.4188	.4432
60	.0873	.1338	.1650	.2108	.2500	.2948	.3248	.3850	.4079
70	.0808	.1238	.1528	.1954	.2319	.2737	.3017	.3583	.3798
80	.0755	.1158	.1430	.1829	.2172	.2565	.2830	.3364	.3568
90	.0712	.1092	.1348	.1726	.2050	.2422	.2673	.3181	.3375
100	.0675	.1036	.1279	.1638	.1946	.2301	.2540	.3025	.3211
120	.0616	.0946	.1168	.1496	.1779	.2104	.2324	.2771	.2943
150	.0551	.0846	.1045	.1339	.1593	.1886	.2083	.2488	.2643
200	.0477	.0733	.0905	.1161	.1381	.1636	.1809	.2162	.2298
300	.0390	.0598	.0740	.0948	.1129	.1338	.1480	.1771	.1884
500	.0302	.0463	.0573	.0735	.0875	.1038	.1149	.1376	.1464

APPENDICE C.

Valori critici per il coefficiente di correlazione lineare r



gdl	0.05	0.025	0.005	gdl	0.05	0.025	0.005
5	.805	.878	.959	17	.412	.482	.606
6	.729	.811	.917	18	.400	.468	.590
7	.669	.754	.875	19	.389	.456	.575
8	.621	.707	.834	20	.378	.444	.561
9	.582	.666	.798	25	.337	.396	.505
10	.549	.632	.765	30	.306	.361	.463
11	.521	.602	.735	35	.283	.334	.430
12	.497	.576	.708	40	.264	.312	.402
13	.476	.553	.684	50	.235	.279	.361
14	.457	.532	.661	60	.214	.254	.330
15	.441	.514	.641	80	.185	.220	.286
16	.426	.497	.623	100	.165	.196	.256

I valori di r nella tabella sono per test a una coda e basati sull'ipotesi nulla $\rho = 0$.